

Application Serial No.: 10/072,345  
Attorney Docket No.: 0190142

**List of Claims:**

**Claim 1 (Currently Amended):** A method for increasing the resolution of an ~~image~~ imaging array, the method comprising:

capturing two or more images within the imaging array, each image captured in a successive time interval corresponding to an image capture and storage rate of the imaging array;

correlating pixels of each at least one of the two or more images by shifting to locate corresponding the pixels of the other images; and

combining the correlated pixels of the two or more selected images into a single enhanced image;

wherein an effective resolution of the single enhanced image is greater than a resolution of each of the two or more images.

**Claim 2 (Previously Presented):** The method of claim 1, wherein the combining comprises:

creating new pixel values by interpolating values between the corresponding pixels of the combined images.

**Claim 3 (Original):** The method of claim 1, wherein the imaging array is comprised of charge-coupled device (CCD) sensors.

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**Claim 4 (Original):** The method of claim 1, wherein the imaging array is comprised of complementary metal oxide semiconductor (CMOS) sensors.

**Claim 5 (Currently Amended):** The method of claim 1, wherein ~~the imaging array is comprised of silicon-germanium (SiGe) sensors~~ the correlating includes multiplying values of shifted pixels and the corresponding pixels of the other images to generate a plurality of products, generating a squared sum of the plurality of products, and obtaining the highest squared sum of the plurality of products.

**Claim 6 (Original):** The method of claim 1, wherein the successive time interval is between 10 milliseconds (ms) and 100 ms.

**Claim 7 (Original):** The method of claim 1, wherein the imaging array is a monochrome imaging array.

**Claim 8 (Currently Amended):** An image enhancing device comprising:  
means for receiving a plurality of successive images from an imaging array;  
a memory for storing the plurality of successive images; and  
means for correlating a first plurality of pixels ~~sensor values~~ of a first image of the plurality of images by shifting to locate ~~with~~ a second plurality of pixels ~~sensor values~~ of

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a second image of the plurality of images corresponding to the first plurality of pixels;  
and

means for combining the first plurality of pixels ~~values~~ with the second plurality of pixels ~~values~~ to generate an enhanced image, such that an effective resolution of the enhanced image is greater than a resolution of either the first image or the second image.

**Claim 9 (Previously Presented):** The image enhancing device of claim 8, further comprising:

means for transmitting an instruction to the imaging array to capture an additional image and to transmit the additional image to the means for receiving.

**Claim 10 (Previously Presented):** The image enhancing device of claim 9, further comprising:

means for determining when the additional image is required from the imaging array; and

means for generating the instruction when the determining means determines the additional image is required.

**Claim 11 (Previously Presented):** The image enhancing device of claim 8, wherein the plurality of successive images are transmitted by the imaging array between 10 milliseconds (ms) and 100 ms apart.

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**Claim 12 (Previously Presented):** The image enhancing device of claim 8,  
wherein the plurality of images are captured within the imaging array by charge-coupled  
device (CCD) sensors.

**Claim 13 (Previously Presented):** The image enhancing device of claim 8,  
wherein the plurality of images are captured within the imaging array by complementary  
metal oxide semiconductor (CMOS) sensors.

**Claim 14 (Currently Amended):** The image enhancing device of claim 8,  
~~wherein the plurality of images are monochrome images~~ the correlating means includes  
multiplying values of the first plurality of pixels and the corresponding second plurality of  
pixels to generate a plurality of products, generating a squared sum of the plurality of  
products, and obtaining the highest squared sum of the plurality of products.

**Claim 15 (Currently Amended):** A digital camera comprising:  
an imaging array; and  
an image enhancement device coupled to the imaging array, the image  
enhancement device including:  
a memory for storing two or more images received form the imaging  
array;

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logic for correlating a first plurality of pixels ~~sensor values~~ of a first image of the two or more of images by shifting to locate with a second plurality of pixels ~~sensor values~~ of a second image of the two or more of images corresponding to the first plurality of pixels; and

logic for combining the first plurality of pixels ~~values~~ with the second plurality of pixels ~~values~~ to generate an enhance image, such that an effective resolution of the enhanced image is greater than a resolution of either the first image or the second image.

**Claim 16 (Previously Presented):** The digital camera of claim 15, the image enhancement device further comprising:

a transmitter configured to transmit an instruction to the imaging array to capture an additional image and to transmit the additional image to the image enhancement device image.

**Claim 17 (Previously Presented):** The digital camera of claim 15, wherein the time between the two or more is between 10 milliseconds (ms) and 100 ms.

**Claim 18 (Original):** The digital camera of claim 15, wherein the two or more images are captured within the imaging array by charge-coupled device (CCD) sensors.

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**Claim 19 (Original):** The digital camera of claim 15, wherein the two or more images are captured within the imaging array by complementary metal oxide semiconductor (CMOS) sensors.

**Claim 20 (Currently Amended):** The digital camera of claim 15, wherein ~~the digital camera is a monochrome camera~~ the logic for correlating includes multiplying values of the first plurality of pixels and the corresponding second plurality of pixels to generate a plurality of products, generating a squared sum of the plurality of products, and obtaining the highest squared sum of the plurality of products.